OPHTHALMOLOGY

UNDER THE CHARGE OF
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New Hypothesis of the Pathogenesis of Nystagmus.—None of the hypotheses thus far advanced to explain the production of nystagmus is entirely satisfactory. Arlt's view that the subjects affected with nystagmus displace their eyes in order to supplement a lack of clearness of the image by an additional number of such images in series cannot apply to those numerous cases in which the vision is greatly lowered, but which do not become nystagmic, while others become so with normal or almost normal visual acuity. On the other hand, many children with congenital blindness show typical nystagmus. Moreover, it would be a mistake to believe that ocular disturbances are alone capable of producing nystagmus. The latter has been frequently observed after otitic suppuration. SAUVINEAU (*Annal. d'Oculist.*, April, 1910, p. 295) holds that nystagmus is due to disturbances or lesions affecting the supranuclear centre which presides over the lateral associated movements, as proved by the fact that when recent it is habitually accompanied by a latent diplopia, of which the subject is himself ignorant, but which can be brought out by careful testing with a red glass. Ocular lesions determine the nystagmus when favored by fault of development of the innervation centres of lateral associated movements. This explains why the same ocular lesion does not cause nystagmus in all who are affected with that lesion.

Idiopathic Ciliary Neuralgia.—MONCORGÉ (*La Clin. Ophtal.*, May, 1911, p. 190) calls attention to a form of severe pain, generally unilateral, in and about the eye without any objective symptoms; the pain is usually diurnal, increases on palpation, and occurs more frequently in men than in women. The affection seems to be entirely independent of the refraction; it has been found to occur in eyes entirely normal. Moncorgé is disposed to believe that this functional affection is a principal if not the sole cause of the ordinary headache of undefined character.

Amblyopia Exanopsia.—From an exhaustive study of the pathogenesis of amblyopia exanopsia and strabismus, CAILLAUD (*Annal. d'Oculist.*, December, 1910, p. 385) concludes that there exists an amblyopia from non-use; amblyopia without objective lesion is most frequently congenital, though it may be acquired; the age is without influence upon the degrees of impairment; it is found in hypermetropia, myopia, or astigmatism. Anisometropia appears to have great influence upon the production and degree of the amblyopia, high degrees of which often accompany slight differences in the refraction of the two eyes. Where such differences are great (3 to 8 D), there is usually but little amblyopia. Weakness of the accommodation does not appear to be a factor. *The amblyopia precedes the strabismus; the latter has no influence upon the development of the amblyopia.* The strabismus only becomes fixed in one eye when the visual acuity of the latter is inferior to its congener; if the visual acuity is equal in the two eyes the strabismus will be the alternating variety.

Exophthalmic Goitre.—FEDERN (*Wien. klin. Woch.*, 1910, No. 16, p. 298) maintains that the disease is due to abnormally high blood pressure. Such elevation depends, as a rule, upon disturbance of the functions of the intestines, which disturbance Federn ascribes to partial atony of the bowel. The disease may also occur as a consequence of other disturbances which result in elevation of the blood pressure. Such disturbances may be seated in the genital system, or may be due to worry, mental overexertion, etc., all conditions which generally cause intestinal disturbances. In many cases an acute element also enters which seems to bring about a sudden development of the affection, but which is really to be regarded as simply an aggravation of an already present, but latent, condition, plus the development of additional symptoms.

Intoxication by Atropine in Children.—COLIN (*La Clin. Ophtalmol.*, December 10, 1910, p. 589) has frequently observed evanescent erythema of the face, chest, and abdomen follow instillations of 0.5 to 1 per cent. aqueous solution of atropine in children aged between two and seven years. Prostration or delirium, so frequently noted in adults, was never observed. In some children the erythema regularly followed each instillation. Most of the subjects were affected with phlyctenular ophthalmia, arguing a reduced condition of the system. The phenomena were particularly noted during the inflammatory attacks, much less frequently in intervals of quiescence. These accidents became very infrequent when collyria in oil were substituted for the aqueous; if the latter are employed the lacrymal puncta should be compressed with the finger.

The Behavior of the Ciliary Body to Antibodies.—SALUS (*Graefe's Archiv*, lxxv, 1) shows that complement cannot be demonstrated in normal aqueous humor. Different antibodies do not pass in the same way into the normal aqueous. Agglutinins and antitoxins pass easiest, while the migration of bacteriolysins is more difficult, and hemolysins the most difficult. The aqueous formed immediately after paracentesis is rich in antibodies, although not to the same extent as serum. The normal ciliary body is completely impervious to albuminous precipitates, but after paracentesis, such precipitates appear in the aqueous; they even appear to occur there with special rapidity. The absolute retention of the precipitates can hardly depend upon special properties of the same; it must be assumed that a certain filtration faculty is possessed by the transuding organ—the capillary endothelium or epithelium of the ciliary body. If the experiment is properly arranged, the precipitation can be followed in the anterior chamber as in a